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ABSTRACT

Institutions of higher education, specifically community colleges, are facing increased accountability and competition, declining resources and enrollments, and unprecedented consumerism. However, according to the services marketing and satisfaction literatures, it is difficult to identify which factors lead to satisfaction. Of significance is that satisfaction measures should come directly from customers. This paper, which includes a review of literature, details a study of consumer satisfaction, drawn from surveys answered by Oregon Community College students in 1994 and 1996. The survey, conducted to identify which factors and educational experiences affect overall/global satisfaction, queried respondents on six independent variables: college services or programs, academic environment, admissions and registration environment, rules and policies environment, facilities environment, racial harmony, and general environment. The dependent variable used was the students' satisfaction with their college experience as a whole, or their "global satisfaction." Results indicated that the average satisfaction rating for various aspects of the institution exhibited a high degree of stability, and that academic environment was the most influential variable affecting global satisfaction. (Contains 37 references.) (EMH)

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Student Satisfaction in Oregon Community Colleges

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Institutions of higher education generally, and community colleges specifically, are facing increased accountability and competition, declining resources and enrollments, and unprecedented consumerism. However, according to the services marketing and satisfaction literatures, it is difficult to identify which factors lead to satisfaction. Of significance is that satisfaction measures should come directly from customers.

Summary of Research Problem

From the standpoint of the institution, the resources used in delivering the satisfactions its constituents desire are a *cost*. From the customer's standpoint, acquiring the desired satisfactions has a *price*, which includes money spent plus time, effort, and opportunity cost (e.g., other things the customer could have done with the same time and/or money). The *value* received is a matter of customer perception judgment, not of the monetary price paid or the monetary cost (Kotler & Fox, 1995).

Of special value for community colleges is Bateson's statement, "the crucial factor for services is that the service level can only be measured through the consumer" (1977, p.10). The issues of consumerism and a highly competitive marketplace (Litten & Hall, 1989) are more significant for community colleges, which depend heavily (though not exclusively) on local constituents. Therefore, this study seeks to identify which factors and educational experience affect Oregon Community College students' global satisfaction, which is instrumental in purchase intentions.

Significance of the Study

Satisfaction

A service organization lives or dies on the basis of its ability to provide satisfaction (Brooks & Hammons, 1993). Because of heterogeneity and the difficulty of controlling quality, constant assessments of customer satisfaction are essential. Some service organizations rely on objective measures such as sales volume and market share. However, these measures need to be supplemented with other information obtained directly from customers themselves.

It is imperative that educational marketers understand the consumers' perception of satisfaction so that it can be effectively managed (Lapidus & Schibrowsky, 1994). For colleges, the consumers (students) don't just inquire, consider, apply, and enroll; rather theirs is a dynamic, individualistic process based on multiple factors leading to satisfaction or dissatisfaction, and subsequent purchase intentions.

Most educational institutions want to be more effective, but they are not sure how to proceed. Focusing on enhancing customer satisfaction is a good place to begin. According to Daniel Seymour:

> Developing a lot of happy satisfied customers--whether they are students, parents of students, alumni, professors, or industry employers--should be a primary goal ... in higher education. (in (Kotler & Fox, 1995, p. 41)

The inability of marketers to provide the desired level of service and satisfaction could ultimately prove to be detrimental. For example, it has been suggested that in the 1990s the average business would lose 20 percent of its customers because of dissatisfaction with service (Timm, 1990). Taken in conjunction with reports which estimate that the cost of obtaining a new customer is five times greater than servicing an existing one, the importance of providing quality service and satisfaction cannot be overemphasized (Szabo, 1989).

Technical Assistance Research Programs (TAR-P), a customer service research and consulting firm headquartered in Washington, D.C., has published some interesting facts concerning customer satisfaction:

* The average business will not hear from 96% of unhappy customers.
* For every person complaining, 26 unhappy customers will not complain.
* 13% of those having a problem with the organization will relate that experience to 20 or more people (TARP, 1986).

Furthermore, dissatisfied consumers are at least twice as likely to tell others about experiences than are satisfied consumers (TARP, 1986).

In the college and university context, a satisfied student means positive word-of-mouth advertising and recommendations to others to enroll (Widdows & Hilton, 1990). Enis (1977), for example, found that attention to long-term student satisfaction paid handsome dividends to the university, including monetary

contributions, word-of-mouth advertising, and future enrollments. Similarly, Hartley and Berkowitz (1983) found that, compared to their dissatisfied counterparts, satisfied alumni contributed more money, were more likely to recommend the university to others, and re-attend the university should they be interested in further education (see also Pate, 1993).

Image

Educational institutions have a vital interest in learning about their various images in the marketplace and making sure that these images accurately and favorably reflect the institution. According to David Garvin,

> An institution's actual quality is often less important than its prestige, or reputation for quality, because it is the university's perceived excellence which, in fact, guides the decisions of prospective students and scholars considering offers of employment, and federal agencies awarding grants. (In Kotler & Fox, 1995, p. 230-231)

Also, an institution's present image is usually based on its past record. Therefore, an institution cannot change its image through a quick change in public relations strategy. Its image is a function of its deeds and its communications. A strong favorable image comes about when the school performs well and generates real satisfaction, then lets others know about its success (Kotler & Fox, 1995).

Thus, institutional constituents are potentially the best promoters of the institution. Their goodwill and favorable word of mouth reach others and make it easy to attract and serve more people. Alumni take pride in the institution and are glad to contribute to its future success. The institution receives favorable attention from the news media, further spreading its story (Kotler & Fox, 1995). There is increasing evidence to suggest that word-of-mouth testimonials have an impact on the decision-making process of the consumer (Birch, 1990).

Institutions are taking a hard look at their images in the community and the way in which they are perceived by a variety of population segments (Topor, 1986). The linkage of enrollment patterns to client perceptions follows the consumer-oriented philosophy of businesses recognized for their excellence and success (Peters & Waterman, 1982). Increasingly, community colleges have turned to educational

marketing to help them better manage their enrollments (Biggerstaff, 1994); this is critical in light of their local constituency. In so doing, they have become more aware of how effectively their image advances the values and vision of their institutions (Biggerstaff, 1994).

Summary of significance of the study

With increased consumerism and decreased resources, institutions must identify what services and educational experiences lead to student satisfaction. Student satisfaction is not only a valuable end in itself, but there also seems to be a warranted intuitive connection to image, such as word of mouth advertising, recommendations regarding enrollment, financial contributions, and general community support, which is so vital to the community college.

Methodology

Variables

Each of the six independent variables are directly from the 1994 and 1996 surveys. The following are each variable with their corresponding survey items-

SRVCS: College Services or Programs

Academic advising course planning services
Personal counseling services (for personal concerns and problems)
Career planning services guidance
Job placement services
Financial aid services
Recreational and intramural programs and services
Library learning resources center services
College-sponsored tutorial services
Student employment services
Cafeteria food services
College-sponsored social activities
Cultural programs and activities
College orientation program
Computer lab services
Parking facilities and services
Child care services

ACDMC: Academic Environment

Testing grading system
Course content in your major area of study
Quality of instruction in your major area of study
Out-of-class availability of your instructors
Attitude of the teaching staff toward students
Variety of courses offered at this 2-year college
Class size
Flexibility to design your own program of study
Availability of your advisor
Value of the information provided by your advisor
Challenge offered by your program of study
Preparation you are receiving for your chosen occupation

ADMSN: Admissions and Registration Environment

General admissions/entry procedures
Accuracy of college information you received before enrolling
Availability of financial aid/scholarship information prior to enrolling
Assistance provided by the college staff when you entered this college
College catalog
Availability of the courses you want at times you can take them
Billing and fee payment procedures

RLS.PLS: Rules and Policies Environment

Rules governing student conduct at this college Student voice in college policies
Academic probation and suspension policies
Purposes for which student activity fees are used
Personal security/safety at this college

FCLTS: Facilities Environment

Classroom facilities
Athletic facilities
Study areas
Student center
College bookstore
General condition and appearance of the buildings and grounds

RCHMNY: Racial Harmony

Attitude of the college non-teaching staff toward students Ethnic racial harmony at this college

GNRL: General Environment

Concern for you as an individual
Attitude of the college non-teaching staff toward students Ethnic racial harmony at this college
Opportunities for student employment
Opportunities for personal involvement in college activities Student government
College media (college newspapers, campus radio, etc.)

The dependent variable is the students' satisfaction with their college experience as a whole, or their *global satisfaction.* The dependent variable is comprised of the mean score of the two survey items listed below:

GLBLST: ***Global Satisfaction With This College***
If you could start college over, would you choose to attend this college?
This college [environment] in general

Reliability

The term *reliability* refers to the stability or internal consistency of individual measures (Borg & Gall, 1989). The standard types of internal-consistency reliability indices typically reported with assessment instruments are not appropriate for this instrument because it has no logical scale on which to base a total score (ACT, 1995). One approach to determining the reliability of this instrument is to administer it to a group of subjects on two separate occasions and compare the responses (test-retest reliability). Even when this is done, however, correctional reliability indices are not appropriate for items that request categorical (nominal) data (ACT, 1995). Although this instrument can be used to explore the impressions of individual students, the data are more typically utilized in group summary form for such purposes as institutional planning and evaluation (ACT, 1995). Colleges are often interested in identifying the relative importance of, use of, or satisfaction with, their programs and services. In this situation, inter-item comparisons are of interest, as opposed to comparisons among individual or group means. Pearson product-moment correlation coefficients revealed the average satisfaction ratings (for individual satisfaction-related items) obtained during a test-retest administration of the instrument. The magnitude of these correlations (.92 and .95) reveal that the average satisfaction rating for various aspects of the institution exhibits a high degree of stability (ACT, 1995).

In order to examine the reliability of the independent variables (e.g., SRVCS, ACDMC, ADMSN, RLS.PLS, FCLTS and GNRL), Cronbach's (1951) coefficient alphas were computed using the SPSS command RELIABILITY. "The reliability coefficient is the ratio of the true-score variance to obtained-score variance. If that ratio is small, measurement error will attenuate correlations with other variables and will make it difficult to find significant effects with statistical treatments" (Nunnally, 1967, p. 222). The reliability coefficient is zero when all of the variation in the data is due to measurement error; the reliability

coefficient is one (1.00) when there is no measurement error (Hull & Nie, 1981). Therefore, the higher the coefficient alpha, the greater the reliability of that which is being measured.

Nunnally (1967) indicated that reliability coefficients of .50 are acceptable for exploratory research, such as this study, and 80 for basic research. The reliability coefficient alphas for the seven independent variables in this study are .738 (SRVCS), .858 (ACDMC), .772 (ADMSN), .747 (RLS.PLS), .766 (FCLTS) and .795 (GNRL) for this group. The RCHRMNY factor does not have a reliability coefficient alpha because it consists of a single item. It is important to note that all of these variables are acceptable for exploratory research, and one would meet the above criteria for basic research. In other words, these variables contain little measurement error and are reliable factors.

Random measurement error is the error introduced into indicators that is unsystematic noise (Berry & Fellowman, 1985). Random error may be introduced into measures for any number of reasons. Where data is collected from human respondents, as in this study, there may be guessing involved or the response categories may be vague or not well defined. In other cases, there may be errors in recording data, or even mistakes in coding and keypunching. More basically, random error may intrude when trying to measure an unobservable or abstract concept with a simple observable property (Berry & Feldman, 1985).

Thus, the reliability is the proportion of the variance of the indicator that reflects the true variable. In the multivariate case, the amount of bias due to random measurement error is not only a function of the reliability's of the independent variables, but the correlations among them as well (Berry & Feldman, 1985). For this study, with reliability coefficient alphas as listed above, the variables are reliable. Also, these variables account for about one-third (R squared = .391) of the variance in students' global satisfaction.

Statistical Analysis

Students' contentment with their overall college experience, their *global satisfaction,* is the dependent variable in this study.

Multiple Regression is used to determine the correlation between a criterion variable and a combination of two or more predictor variables (Borg, Gall & Gall, 1993). If the measured variables,

when combined, predict student global satisfaction on a measure perfectly, the percentages would total 100. There are two reasons why multiple regression was selected for this study. First, multiple regression has the ability to provide an assessment of the amount of variance in the dependent variable as explained by the combined independent variables (Borg & Gall, 1989). This overall variance is known as the *coefficient of determination*, or R2, and is a measure of the *goodness of fit* of a specific model (Norusis, 1990, p. 248). Second, multiple regression has the ability to provide the impact an individual independent variable has on the dependent variable, while controlling for variation of all other independent variables in the analysis (Kim & Kohout, 1975). The impact an individual independent variable has on the dependent variable is known as a beta weight.

The SPSS command REGRESSION was used to analyze the data. Prior to the REGRESSION analysis, frequencies of questionnaire item responses were conducted using the SPSS command FREQUENCIES. As a result, the researcher was not satisfied that missing values for questionnaire items were random. The questionnaire was designed so that students who did not use a service, or who did not have the service available at their institution, did not answer the *level of satisfaction* portion of the survey. Therefore, missing cases, whether because the service was not available, was not used, or was not answered, were made to equal three (3). The rationale for this decision is that all responses were on a five-point likert scale, with three (3) being a "neutral" response. The researcher simply made all missing data to appear as neutral responses on any given item. Unfortunately, it is impossible to differentiate between students who used a given service and failed to answer the satisfaction question and those who did not use the service and failed to answer the satisfaction question. This likely accounts for some of the measurement error.

LISTWISE missing-value data treatment was utilized in the REGRESSION analysis. Using LISTWISE, the most stringent missing-value data treatment because it eliminates cases with missing values on any variable from the analysis (Bohrnstedt & Knoke, 1983), was appropriate because no values were missing. This conceptually makes sense in light of the linear assumption using continuous data.

SPSS ENTER subcommands were used to enter the variables; ENTER is a forced entry procedure, and all variables named are entered in a single step (Norusis, 1990). The seven variables were listed in SPSS commands in the order in which they were listed on the questionnaire.

Regression Analysis

Multiple regression was used to ascertain which of the seven predictor variables accounted for the greatest amount of variance in the dependent variable, Oregon community college students' global satisfaction (GLBLST). In other words, the researcher wanted to identify which variables, representing specific institutional services or experiences, had the greatest effect on global satisfaction. Table 1 lists the R square, significance of T values, and beta weights (non-standardized regression coefficients) for students in the 1996 sample. These identify the amount of variance each variable had (i.e., each variable's beta weights) in the analysis.

All Students

From Table 1 we can observe that when all students were analyzed, the variables account for over one - third (R^2 = .391) of the variance for students' global satisfaction. Also, six of the seven variables were significant at the p < . 05 level, with RLS.PLS not meeting that criteria.

Table 1

1996 Regression Analysis

Student Analysis and Factors	1996 R^2	1996 Sig. of T	1996 Beta
All	.391		
SRVCS		.000	.218
ACDMC		.000	.483
ADMSN		.000	.137
RLS.PLS		.515	-.015
FCLTS		.000	.154
RCHMNY		.000	.072
GNRL		.000	.093
(constant)		.011	-.224

Thus, as a result of the regression analysis, six of the seven independent variables significantly (p<.05) affected the dependent variable GLBLST (i.e., the community college students' global satisfaction). The beta weights for these variables ranged from .483 for ACDMC to .137 for ADMSN. The beta weights indicate that as level of satisfaction for an independent variable increases, the students' likelihood of global satisfaction increases.

ACDMC is a most influential variable affecting students' global satisfaction (p < .05). The variable ACDMC was comprised of twelve items, each of which address academic services or experiences. The significance of the T ratio for ACDMC was .000 and the beta was .483. These findings indicate that as students' perceived satisfaction of academic services and experiences increases, their global satisfaction also increases. This is consistent with the satisfaction and retention literatures. Academic-related variables

are hypothesized to have a direct, positive influence on satisfaction (Bean & Bradley, 1986; Okun & Weir, 1990). According to the satisfaction literature, academic integration includes grade performance, intellectual development, perception of faculty concern for teaching and student development, and informal contacts with faculty concerning academic, intellectual and career matters (Cooper & Bradshaw, 1984). The ACDMC variable in this study has items that include all these issues, with the exception of grade performance. Also, when students have been asked to rate the characteristics of institutions important in their decision to apply to or attend a particular college or university, the characteristics cited most often by them are (in rank order): special academic programs, tuition costs, availability of financial aid, general academic reputation or quality, location or distance from home, size of student body, and social atmosphere (Douglas, Powers & Choroszy, 1982; Dahl, 1982; Konnert & Giese, 1987; Maguire & Lay, 1981; Litten, 1982; Litten, Sullivan & Brodigan, 1983; Chapman & Jackson, 1987). Again, academic-related concerns are the most influential. In addition, Beal and Noel (1980) found that college and university officials identified effective teaching as the second most important institutional variable related to student retention. While community college faculty are often part-time, and may not be on campus long enough to have informal contact with students (Bean, 1990), these findings demonstrate that ACDMC is important to community college students' global satisfaction.

SRVCS, FCLTS and ADMSN are also influential variables affecting students' global satisfaction ($p < .05$). The variable SRVCS was comprised of sixteen items, each of which addressed college services or programs. The significance of the T ratio for SRVCS was .000 while the beta was .218. The variable FCLTS was comprised of six items, each of which address students' perceptions of institutional facilities. The significance of the T ratio for FCLTS was .000 and the beta was .154. The variable ADMSN was comprised of seven items, each of which addressed college admissions and registration procedures and information. The significance of the T ratio for ADMSN was .000 while the beta was .137. These findings indicate that as students' perceived satisfaction of services/programs, facilities, and admissions/registration increased, their global satisfaction also increased.

RCHMNY and GNRL are also influential variables affecting students' global satisfaction ($p<.05$). RCHMNY was a single-item variable related to student satisfaction with ethnic racial harmony at this college. The significance of the T ratio for RCHMNY was .000 while the beta was .072. The variable GNRL was comprised of six items, including a broad range of subjects. The significance of the T ratio for GNRL was .000 while the beta was .093. These findings indicate that as students' perceived satisfaction of racial harmony increased, their global satisfaction also increased. These findings also indicate that as students' perceived satisfaction of the miscellaneous items comprised in the GNRL variable increased, their global satisfaction also increased.

Gender Differences

The variables used in these regression analyses account for over one-third (R squared = .397 for male and .389 for female students) of the variance in students' global satisfaction (see Table 2). For male students, ACDMC, ADMSN, FCLTS, RCHMNY and GNRL were significant at the $p < .05$ level. For female students, ACDMC, SRVCS, FCLTS, ADMSN, RCHMNY and GNRL were all significant at the $p < .05$ level. For male students, the five independent variables affecting GLBLST had beta weights ranging from .527 to .092. For female students the six independent variables significantly affecting GLBLST had beta weights ranging from .461 to .059.

Table 2

1996 Regression Analysis			
Student Analysis and Factors	**1996 R^2**	**1996 Sig. of T**	**1996 Beta**
Male	.397		
SRVCS		.206	.066
ACDMC		.000	.527
ADMSN		.000	.143
RLS.PLS		.845	.070
FCLTS		.000	.151
RCHMNY		.000	.091
GNRL		.025	.092
(constant)		.542	.081
Female	.389		
SRVCS		.000	.328
ACDMC		.000	.461
ADMSN		.000	.116
RLS.PLS		.299	-.031
FCLTS		.000	.159
RCHMNY		.000	.059
GNRL		.006	.092
(constant)		.009	-.309

Male Students

ACDMC, FCLTS, ADMSN and RCHMNY are the most influential variables affecting male students' global satisfaction ($p < .05$). The T ratio for ACDMC was .000 with a beta weight of .527. The T ratio for FCLTS was .000 with a beta weight of .151. ADMSN had a T ratio of .000 and beta weight of .143, while RCHMNY had a T ratio of .000 and beta weight of .091. These findings indicate that as male

students' perceived satisfaction of academic services/experiences, facilities, admissions/registration procedures, and racial harmony increase, their global satisfaction also increases.

GNRL is the only other variable that had a significant ($p < .05$) affect on male students' global satisfaction. The T ratio for GNRL was .025 for males, with a beta weight of .092. As male students' perceived satisfaction with these miscellaneous items increases, their global satisfaction also increased.

Female Students

While six of the seven independent variables affected female students global satisfaction, RLS.PLS did not. ACDMC is the most influential variable affecting female students' global satisfaction ($p < .05$) with a T ratio of .000 and a beta weight of .461. The T ratio for SRVCS was .000 with a beta weight of .328. The T ratio for FCLTS was .000 and the beta weight was .159. For ADMSN, the T ratio was .000 and the beta weight was .116. The T ratio for RCHMNY was .000 and the beta weight was .059. Finally, the T ratio for GNRL was .006 and the beta weight was .092. These findings indicate that as female students' perceived satisfaction of academic services/experiences, services, facilities, admissions/registration, racial harmony, and the items that comprise the GNRL factor increases, their global satisfaction also increases.

Age Differences

For students ≤ 22 years of age, ACDMC, ADMSN, FCLTS, RCHMNY, SRVCS and GNRL were significant at the $p < .05$ level. Their T ratio ranged from .000 to .014 and their beta weights ranged from .459 to .066. For students ≥ 23 years of age, ACDMC, SRVCS, FCLTS, ADMSN, RCHMNY and GNRL were also significant at the $p < .05$ level. Their T ratio ranged from .000 to .024 and their beta weights ranged from .462 to .076 (see Table 3)

Table 3

1996 Regression Analysis			
Student Analysis and Factors	**1996 R^2**	**1996 Sig. of T**	**1996 Beta**
≤ 22 years	.347		
SRVCS		.012	.143
ACDMC		.000	.459
ADMSN		.000	.171
RLS.PLS		.829	.079
FCLTS		.000	.161
RCHMNY		.001	.066
GNRL		.014	.098
(constant)		.203	-.192
≤ 23 years	.420		
SRVCS		.000	.261
ACDMC		.000	.462
ADMSN		.000	.098
RLS.PLS		.368	-.026
FCLTS		.000	.180
RCHMNY		.000	.078
GNRL		.024	.076
(constant)		.385	-.093

≤ 22 Years of Age

ACDMC is the most influential variable affecting ≤22 year-old students' global satisfaction ($p < .05$). The T ratio for ACDMC was .000 and the beta weight was .459. These findings indicate that as ≤ 22 year-old students' perceived satisfaction of the academic environment increases, their global satisfaction also increases. ADMSN was an influential variable affecting ≤22 year-olds global satisfaction ($p < .05$), with a T ratio of .000 and beta weight of .171. The next most influential variable affecting this group was

FCLTS, with a T ratio of .000 and beta weight of .161. RCHMNY was a T ratio of .001 and beta weight of .066, SRVCS had a T ratio of .012 and beta weight of .143, and GNRL had a T ratio of .014 and beta weight of .098, making these three also influential variables on ≤22 year-old students global satisfaction ($p < .05$). In other words, as ≤22 years-of-age students' perceived satisfaction with admission/registration procedures, facilities, racial harmony, services, and the general items increased, their global satisfaction also increased.

≥23 Years of Age

Again, ACDMC was the most influential variable affecting ≥23 year-old students' global satisfaction ($p < .05$), and SRVCS was a close second. The T ratio for ACDMC was .000 and the beta weight was .462. The T ratio for SRVCS was .00 and the beta weight was .261. These findings indicate that as ≥22 year-old students' perceived satisfaction of the academic environment and of services increases, their global satisfaction also increases. FCLTS had a T ratio of .000 and beta weight of .180, ADMSN had a T ratio of .000 and beta weight of .098, RCHMNY had a T ratio of .000 and beta weight of .078, and GNRL had a T ratio of .024 and beta weight of .076. In other words, as ≥23 year-old students' perceived satisfaction with facilities, admissions/registration procedures, racial harmony, and the general items increases, their global satisfaction also increases.

Racial Differences

For non-Hispanic white students, ACDMC, SRVCS, FCLTS, ADMSN, RCHMNY and GNRL were significant at the $p < .05$ level. For Hispanic students, only ADMSN was significant at the $p < .05$ level. For non-Hispanic minority students, ACDMC, FCLTS, RCHMNY and ADMSN were significant at the $p < .05$ level, but SRVCS was close to this standard. For non-Hispanic white students, the six independent variables affecting GLBLST had beta weights ranging from .490 to .053. For Hispanic students only independent variables significantly affecting GLBLST had a beta weight of .404. For non-Hispanicminority students, th four independent variables affecting GLBLST had beta weights ranging from .522 to .129 (see Table 4).

Table 4

1996 Regression Analysis			
Student Analysis and Factors	**1996 R^2**	**1996 Sig. of T**	**1996 Beta**
White Non-Hispanic	.371		
SRVCS		.000	.241
ACDMC		.000	.490
ADMSN		.000	.125
RLS.PLS		.837	-.052
FCLTS		.000	.139
RCHMNY		.000	.053
GNRL		.001	.098
(constant)		.063	-.194
Hispanic	.484		
SRVCS		.590	.123
ACDMC		.476	.143
ADMSN		.008	.404
RLS.PLS		.386	.142
FCLTS		.228	.177
RCHMNY		.787	-.024
GNRL		.573	.098
(constant)		.858	.095
Non-Hispanic Minority	.427		
SRVCS		.060	.168
ACDMC		.000	.522
ADMSN		.013	.158
RLS.PLS		.239	-.084
FCLTS		.000	.223
RCHMNY		.001	.129

White Non-Hispanic Students

ACDMC and SRVCS were very influential variables affecting white non-Hispanic students' global satisfaction ($p < .05$). The T ratio for ACDMC was .000 and the beta weight was .490. The T ratio for SRVCS was .000 and the beta weight was .241. These findings indicate that as white non-Hispanic students' perceived satisfaction of academics and services/programs increased, their global satisfaction also increased. FCLTS, ADMSN, RCHMNY and GNRL were also influential variables affecting white non-Hispanic students' global satisfaction ($p < .05$). The T ratio for FCLTS, ADMSN, RCHMNY and GNRL were .000, .000, .000, and .001 respectively, and their beta weights were .139, .125, .053, and .098 respectively. In other words, as white non-Hispanic students' perceived satisfaction with facilities, admission/registration, racial harmony, and the general items increased, their global satisfaction also increased.

Hispanic Students

Only one variable, ADMSN, was influential in affecting Hispanic students' global satisfaction ($p < .05$). The T ratio for ADMSN was .008 and the beta weight was .404. This finding indicates that as Hispanic students' perceived satisfaction of admission/registration procedures increased, their global satisfaction also increased.

Non-Hispanic Minority Students

ACDMC and FCLTS were very influential variables affecting non-Hispanic minority students' global satisfaction ($p < .05$). The T ratio for ACDMC was .000 and the beta weight was .522. The T ratio for FCLTS was .000 and the beta weight was .223. These findings indicate that as non-Hispanic minority students' perceived satisfaction of academics and facilities increased, their global satisfaction also increased.

RCHMNY and ADMSN were also influential variables affecting non-Hispanic minority students' global satisfaction ($p < .05$), while SRVCS was close to meeting this criteria for this group. The T ratio for RCHMNY, ADMSN, and SRVCS were .001, .013, and .060 respectively, and their beta weights were

.129, .158, and .168 respectively. In other words, as non-Hispanic minority students' perceived satisfaction with racial harmony, admission/registration, and services increased, their global satisfaction also increased.

Significant Findings

Of special value for community colleges is Bateson's statement, "the crucial factor for services is that the service level can only be measured through the consumer" (Litten & Hall, 1989) (page 1)

Developing a lot of happy satisfied customers--whether they are students, parents of students, alumni, professors, or industry employers--should be a primary goal ... in higher education. (in Kotler & Fox,) (page 2)

...the cost of obtaining a new customer is five times greater than servicing an existing one, the importance of providing quality service and satisfaction cannot be overemphasized (Szabo, 1989). (page 2)

...a satisfied student means positive word-of-mouth advertising and recommendations to others to enroll (Widdows & Hilton, 1990). (page 2)

An institution's actual quality is often less important than its prestige, or reputation for quality, because it is the university's perceived excellence which, in fact, guides the decisions of prospective students... (In Kotler & Fox, 1995, p. 230-231) (page 3)

...an institution's present image is usually based on its past record. (page 3)

The dependent variable is the students' satisfaction with their college experience as a whole, or their *global satisfaction*. The dependent variable is comprised of the mean score of the two survey items listed below:

GLBLST: ***Global Satisfaction With This College***

If you could start college over, would you choose to attend this college?
This college [environment] in general (page 6)

Although this instrument can be used to explore the impressions of individual students, the data are more typically utilized in group summary form for such purposes as institutional planning and evaluation (ACT, 1995). (page 6)

The magnitude of these correlations (.92 and .95) reveal that the average satisfaction rating for various aspects of the institution exhibits a high degree of stability (ACT, 1995). (page 6)

Nunnally (1967) indicated that reliability coefficients of .50 are acceptable for exploratory research, such as this study, and 80 for basic research. The reliability coefficient alphas for the independent variables in this study are **.738** (SRVCS), **.858** (ACDMC), **.772** (ADMSN), **.747** (RLS.PLS), **.766** (FCLTS) and **.795** (GNRL) for this group. The RCHRMNY factor does not have a reliability coefficient alpha because it consists of a single item. (page 7)

...six of the seven independent variables significantly ($p<.05$) affected the dependent variable GLBLST (i.e., the community college students' global satisfaction) when all students were analyzed. (page 10)

The beta weights indicate that as level of satisfaction for an independent variable increases, the students' likelihood of global satisfaction increases... ACDMC is a most influential variable affecting students' global satisfaction ($p < .05$). (page 10)

These findings indicate that as students' perceived satisfaction of academic services and experiences increases, their global satisfaction also increases. (page 10)

Beal and Noel (1980) found that college and university officials identified effective teaching as the second most important institutional variable related to student retention. (Bean, 1990) (page 11)

These findings indicate that as students' perceived satisfaction of services/programs, facilities, and admissions/registration increased, their global satisfaction also increased. (page 11)

ACDMC, FCLTS, ADMSN and RCHMNY are the most influential variables affecting **male students'** global satisfaction ($p < .05$). (page 13)

While six of the seven independent variables affected **female students'** global satisfaction, RLS.PLS did not. (page 14)

ACDMC is the most influential variable affecting **≤22 year-old students'** global satisfaction ($p < .05$). (page 15)

Again, ACDMC was the most influential variable affecting **≥23 year-old students'** global satisfaction ($p < .05$) (page 16)

ACDMC and SRVCS were very influential variables affecting **white non-Hispanic students'** global satisfaction ($p < .05$). (page 18)

Only one variable, ADMSN, was influential in affecting **Hispanic students'** global satisfaction ($p < .05$). (page 18)

ACDMC and FCLTS were very influential variables affecting **non-Hispanic** minority students' global satisfaction ($p < .05$). (page 18)

Challenging Questions

1. If the ACDMC variable is the most influential on Oregon community college students' global satisfaction, what implications does this have for Student Services staff?

2. Whether considering all students, gender differences, age differences, or ethnic differences, no statistical correlation exists between students' perceptions of the rules and policies environment at Oregon community colleges and students' global satisfaction with the college at which they are enrolled. What implications, if any, might this have for student services staff?

3. SRVCS is a significant ($p<.05$) variable in female, but not male students global satisfaction. This seems consistent with the literature, but what are the ramifications for student services staff?

4. SRVCS are more influential for ≥23 year and older students than for younger students global satisfaction. What are the ramifications for student services officers?

5. ADMSN is the only variable which significantly ($p<.05$) affects Hispanic students' global satisfaction. Why and what are the ramifications?

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